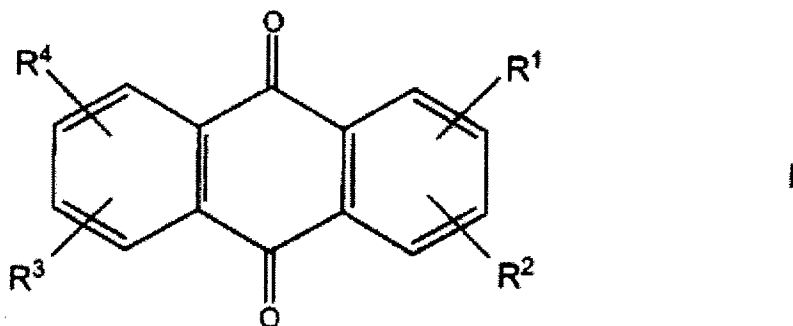


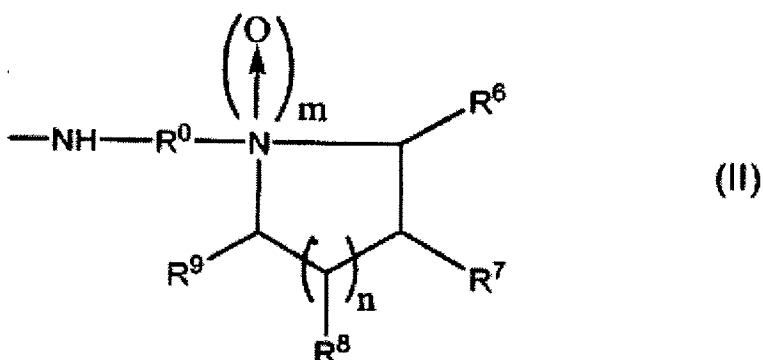
## THE CLAIMS

A listing of the claims are as follows.

1. (Original) An anthraquinone compound of the general formula I or a salt thereof



in which  $R^1$  to  $R^4$  are each selected from the group consisting of H,  $C_{1-4}$  alkyl,  $X^1$ ,  $-NHR^ON(R^5)_2$  in which  $R^O$  is a  $C_{1-12}$  alkanediyl and each  $R^5$  is H or optionally substituted  $C_{1-4}$  alkyl, and a group of formula II



in which at least one of  $R^6$ ,  $R^7$  and  $R^8$  is selected from  $X^2$ , and  $X^2$  substituted  $C_{1-4}$  alkyl and any others are H or  $C_{1-4}$  alkyl;  $R^9$  is selected from H,  $C_{1-4}$  alkyl,  $X^2$  and  $X^2$  substituted  $C_{1-4}$  alkyl;

$m$  is 0 or 1;

$n$  is 1 or 2;

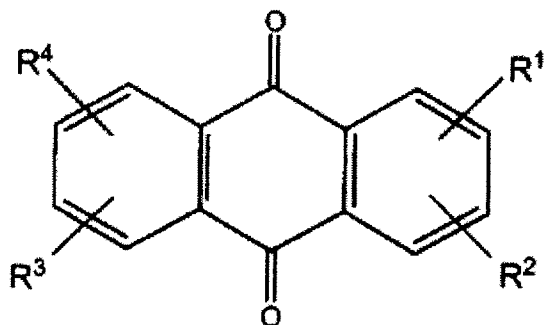
$X^1$  is a halogen atom, a hydroxyl group, a  $C_{1-6}$  alkoxy group, an aryloxy group or an acyloxy group; and

$X^2$  is a halogen atom, a hydroxyl group, a  $C_{1-6}$  alkoxy group, an aryloxy group or an acyloxy group;

provided that at least one of  $R^1$  to  $R^4$  is a group of formula II.

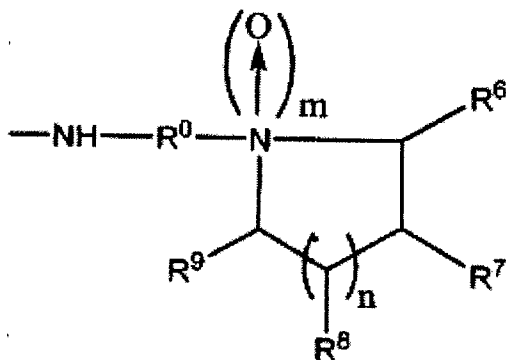
2. (Original) A compound according to claim 1 in which  $R^1$  and  $R^2$  are each a group of formula II.
3. (Original) A compound according to claim 1 in which  $R^1$  is a group of formula II and  $R^2$  is  $NHR^5N(R^5)_2$ .
4. (Original) A compound according to claim 3 in which each  $R^5$  is the same and is H or  $CH_3$ .
5. (Previously Presented) A compound according to claim 2, in which  $R^1$  is at position 4 in the anthraquinone ring system and  $R^2$  is in position 1.
6. (Previously Presented) A compound according to claim 1, in which  $R^3$  and  $R^4$  are selected from H and hydroxyl.
7. (Original) A compound according to claim 6 in which  $R^3$  and  $R^4$  are both hydroxyl and are substituted at positions 5 and 8 in the anthraquinone ring system.
8. (Original) A compound according to claim 6 in which  $R^3$  and  $R^4$  are both H.
9. (Previously Presented) A compound according to claim 1, in which m is 1.
10. (Previously Presented) A compound according to claim 1, in which m is 0.
11. (Previously Presented) A compound according to claim 1, in which n is 2.
12. (Previously Presented) A compound according to claim 1, in which  $X^2$  is a halogen atom or a leaving group.
13. (Original) A compound according to claim 12, in which  $X^2$  is chlorine.

14. (Previously Presented) A compound according to claim 1, in which either
- i)  $R^6$  is  $CH_2X^3$  and  $R^7$  is H; or
  - ii)  $R^6$  is H and  $R^7$  is  $X^3$ .
15. (Original) A compound according to claim 14 in which  $R^6$  is  $CH_2X^3$  and  $R^7$  is H.
16. (Original) A compound according to claim 15 in which n is 2 and  $R^9$  is  $CH_2X^3$  in which  $X^3$  is the same as  $X^3$  in  $R^6$ .
17. (Canceled)
18. (Previously Presented) A composition comprising a compound according to claim 9 and an excipient.
19. (Original) A composition according to claim 18 which is a pharmaceutical composition and in which the excipient is a pharmaceutically acceptable excipient.
20. (Currently Amended) A method of treating an animal by therapy, comprising administration to the animal of a medicament comprising Use of a compound according to claim 9 in the manufacture of a medicament for use in the treatment of an animal by therapy.
21. (Currently Amended) ~~Use~~ The method according to claim 20 in which the animal is a human.
22. (Currently Amended) ~~Use~~ The method according to claim 20 in which the animal is suffering from a tumour and the therapy is anti-tumour therapy.
23. (Currently Amended) ~~Use~~ The method according to claim 20 in which the compound is an anthraquinone compound of the general formula I or a salt thereof



I

in which  $R^1$  to  $R^4$  are each selected from the group consisting of H,  $C_{1-4}$  alkyl,  $X^1$ ,  $-NHR^ON(R^5)_2$  in which  $R^O$  is a  $C_{1-12}$  alkanediyl and each  $R^5$  is H or optionally substituted  $C_{1-4}$  alkyl, and a group of formula II



(II)

in which at least one of  $R^6$ ,  $R^7$  and  $R^8$  is selected from  $X^2$ , and  $X^2$  substituted  $C_{1-4}$  alkyl and any others are H or  $C_{1-4}$  alkyl;  $R^9$  is selected from H,  $C_{1-4}$  alkyl,  $X^2$  and  $X^2$  substituted  $C_{1-4}$  alkyl;

$m$  is 1;

$n$  is 1 or 2;

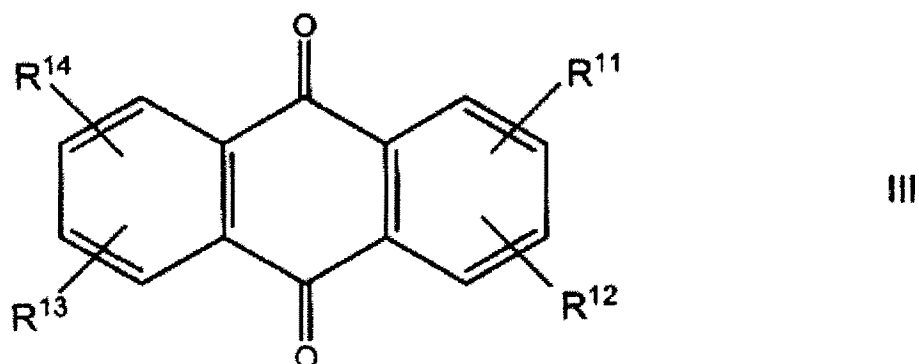
$X^1$  is a halogen atom, a hydroxyl group, a  $C_{1-6}$  alkoxyl group, an aryloxy group or an acyloxy group; and

$X^2$  is a halogen atom, a hydroxyl group, a  $C_{1-6}$  alkoxyl group, an aryloxy group or an acyloxy group;

provided that at least one of  $R^1$  to  $R^4$  is a group of formula II

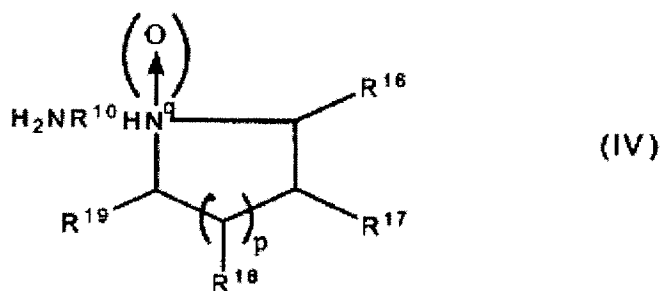
and in which the therapy additionally involves administration of a cytotoxic agent and/or radio therapy of the tumour, in which the animal is suffering from a tumour and the therapy is anti-tumour therapy.

24. (Original) A synthetic method in which a compound of the formula III

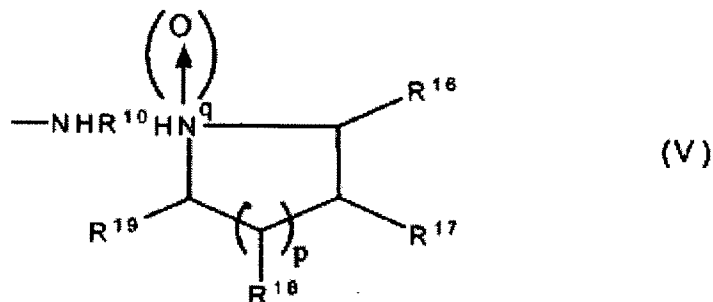


in which  $R^{11}$  to  $R^{14}$  are each selected from the group consisting of H,  $X^4$ , hydroxyl,  $C_{1-4}$  alkoxy, acyloxy, a group  $-NHR^{10}N(R^{15})_2$  in which  $R^{10}$  is a  $C_{1-12}$  alkane diyl and each  $R^{15}$  is H or optionally substituted  $C_{1-4}$  alkyl, and in which  $X^4$  is a halogen atom or a leaving group provided that at least one of  $R^{11}$  to  $R^{14}$  is  $X^4$ ;

is reacted with a cyclic aminoalkylamine compound of the general formula IV



such that the group  $X^4$  is replaced in a nucleophilic substitution reaction by a group of formula V



in which either at least one of  $R^{16}$ ,  $R^{17}$  and  $R^{18}$  is selected from  $X^5$  and  $X^5$  substituted  $C_{1-4}$  alkyl, and  $R^{19}$  is selected from H,  $C_{1-4}$  alkyl,  $X^5$  and  $X^5$  substituted  $C_{1-4}$  alkyl

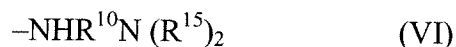
$X^5$  is hydroxyl or a protected hydroxyl, or  $X^5$  is a leaving group or a halogen atom different to  $X^4$  and q is 0 or 1.

25. (Original) A method according to claim 24 in which at least one group  $X^5$  is hydroxyl or protected hydroxyl and in which the product is reacted with a halogenating compound optionally after deprotection to replace the or each  $X^5$  hydroxyl group by a halogen atom.

26. (Original) A method according to claim 25 in which the halogenating agent is a chlorinating agent.

27. (Previously Presented) A method according to claim 24, in which q is 0 and the product is oxidised at the ring nitrogen atom to form the corresponding amine oxide (q is 1).

28. (Previously Presented) A method according to claim 24, in which one of  $R^{11}$  to  $R^{14}$  is a group  $-NHR^{10}N(R^{15})_2$  and which involves the preliminary step of reacting a precursor compound in which the corresponding group  $X^6$  where  $X^6$  is a halogen atom or a leaving group, with an acyclic aminoalkylamine compound of general formula VI



In a preliminary nucleophilic substitution reaction in which  $X^6$  is replaced by the group  $-NHR^{10}N(R^{15})_2$ , in which  $R^{15}$  is H or an optionally substituted  $C_{1-4}$  alkyl group.

29. (Previously Presented) A method according to claim 23, in which  $R^{11}$  and  $R^{12}$  are the same and are  $X^5$  and in which 2 equivalents of the cyclic aminoalkylamine compound IV are reacted whereby both groups  $X^4$  are replaced by the said group of general formula V.

30-36. (Canceled)

37. (Previously Presented) A compound according to claim 10 for use in a method of treatment of an animal by therapy.

38. (Previously Presented) A compound according to claim 12 for use in a method of treatment of an animal by therapy.

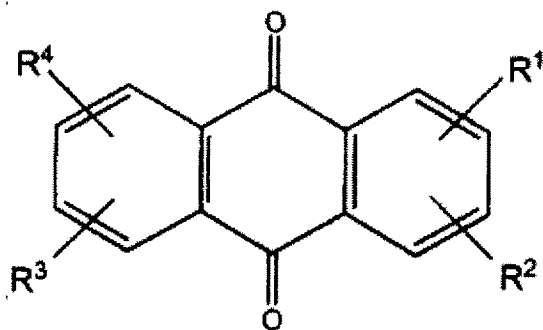
39. (Previously Presented) A composition comprising a compound according to claim 10 and an excipient.

40. (Previously Presented) A composition comprising a compound according to claim 12 and an excipient.

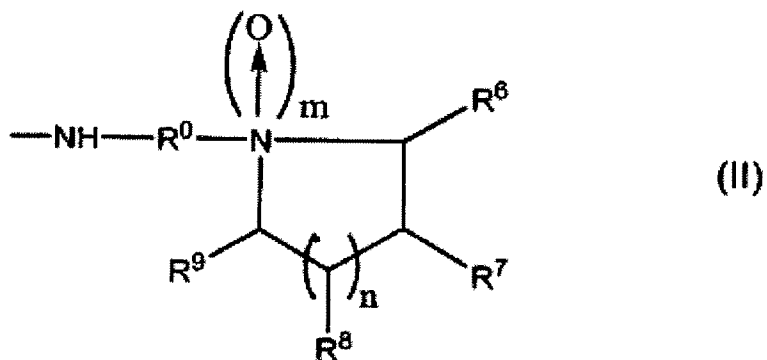
41. (Previously Presented) Use of a compound according to claim 10 in the manufacture of a medicament for use in the treatment of an animal by therapy.

42. (Previously Presented) Use of a compound according to claim 12 in the manufacture of a medicament for use in the treatment of an animal by therapy.

43. (Currently Amended) Use The method according to claim 21 in which the compound is an anthraquinone compound of the general formula I or a salt thereof



in which  $R^1$  to  $R^4$  are each selected from the group consisting of H,  $C_{1-4}$  alkyl,  $X^1$ ,  $-NHR^5$ ,  $-N(R^5)_2$ ,  $-NHR^5N(R^5)_2$  in which  $R^5$  is H or optionally substituted  $C_{1-4}$  alkyl, and a group of formula II



in which at least one of  $R^6$ ,  $R^7$  and  $R^8$  is selected from  $X^2$ , and  $X^2$  substituted  $C_{1-4}$  alkyl and any others are H or  $C_{1-4}$  alkyl;  $R^9$  is selected from H,  $C_{1-4}$  alkyl,  $X^2$  and  $X^2$  substituted  $C_{1-4}$  alkyl;

$m$  is 1;

$n$  is 1 or 2;

$X^1$  is a halogen atom, a hydroxyl group, a  $C_{1-6}$  alkoxy group, an aryloxy group or an acyloxy group; and

$X^2$  is a halogen atom, a hydroxyl group, a  $C_{1-6}$  alkoxy group, an aryloxy group or an acyloxy group;

provided that at least one of  $R^1$  to  $R^4$  is a group of formula II

and in which the therapy additionally involves administration of a cytotoxic agent and/or radio therapy of the tumour, in which the animal is suffering from a tumour and the therapy is anti-tumour therapy.